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PERSONALITY RIGIDITY AS A VARIABLE IN DEPRESSION

by

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A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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ABSTRACT

The major purpose of this study was to determine if personality rigidity is a variable in depression. A secondary purpose was to determine the efficacy of the Day Therapy Program at the Edmonton General Hospital in relieving the symptomology of depression. The subjects of this study were twenty patients involved in the Day Therapy Program. Patients selected were those diagnosed as "depressed" by the referring physician or psychiatrist.

Self-administered pre and post test measures were utilized to determine the degree of depression, number of reported problems and degree of personality rigidity. There was a time interval of approximately one month between pre and post test measures.

Pearson product-moment correlation coefficients were conducted to assess:

(1) the degree of relation between personality rigidity and depression.

(2) the degree of relation between number of reported problems and depression.

Analysis of variance with repeated measurements was conducted to assess:

(1) the significance of the differences in degree of depression between pre and post test measures.

(2) the significance of the differences in number of problems between the pre and post test measures

(3) the significance of the differences between the pre and post test measures of personality rigidity.

Findings of this study indicated that:

(1) there is no apparent relationship between personality rigidity and depression,

(2) there is a significant relationship between depression and number of reported problems.

(3) patients were significantly less depressed and reported significantly fewer problems after one month's involvement in the Day Therapy program.

Implications and suggestions for further research emphasized the need for continued investigation of the syndrome of clinical depression in the areas of (1) classifications of depression, (2) effective treatment programs, and (3) prevention of initial and recurring attacks of depression.

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CHAPTER I

INTRODUCTION

Depression ranks as one of the most common psychiatric disorders and major mental health problems in recent years (Beck, 1979). The true incidence of depression is unknown, however, it has been estimated that between ten and twelve percent of the adult population will experience an episode of depression severe enough to warrant professional treatment (Ayd, 1961; Beck, 1979).

Other related statistics indicate that:

(a) one out of five Americans will have an affective disorder in his or her lifetime (Rehm, 1981).

(b) one out of eight Canadians will require treatment for a psychiatric problem during his or her lifetime (Corneil, 1981).

(c) 75 percent of all psychiatric hospitalizations can be attributed to depression (Secunda, Katz, Friedman and Schuyler, 1973).

(d) after an initial attack of depression, 47 to 79 percent of the patients will have a recurrence at some time in their lives (Beck, 1967).

(e) 5 percent of hospitalized patients diagnosed as depressed, subsequently commit suicide (Beck, 1967).

In view of the above statistics, it is readily apparent that a more thorough understanding of the causes, diagnosis, treatment and prevention of depression is desperately needed.

Background to the Study

The onset of clinical depression is generally linked to specific or nonspecific stress factors or to prolonged psychological strain (Beck, 1967). Several investigators have recently established a relationship between stressful life events and physical and psychiatric illnesses (Holmes and Rahe, 1967; Dohrenwend and Dohrenwend, 1974).

Hudgens (1974) indicates that while it is commonly agreed that stressful life events do not "cause" physical or psychiatric illness per se, it has been demonstrated that a causal connection exists between stressful life events and a heightened sensitivity to, or worsening of conditions already underway. In summarizing a series of studies regarding the number of stressful life events occurring before the onset of a variety of psychiatric disorders, Paykel (1974) concluded that suicide attempters reported the most events and depressives the next highest number.

In this age of uncertainty which is characterized by rapid technological change, high unemployment, severe economic pressures, increasing geographical and occupational mobility, high divorce rates and the dissolution of traditional family structures with the changing roles of men and women; it is evident that each one of us must cope with an increasing number of stressful life events. One has every reason to believe, therefore, that the incidence of psychiatric illness, specifically suicide and depression, will also increase.

Regardless of the unique life change events which precipitate the onset of depression, an individual's susceptibility to becoming depressed may be enhanced by an inability to cope with today's everchanging, complex and ambiguous environment, which necessitates the acquiring of new information and learnings. In other words, a depression-prone individual may be characterized by personality rigidity, as opposed to flexibility, in adapting and coping with stressful life events.

Personality rigidity restricts the individual's ability to acquire new habits or response sets that conflict with previous learnings.

This difficulty often correlates with rigidity of thought and behavior, a narrowing of the individual's perception of the environment and the resultant utilization of his or her full potentialities in adapting to the environment (Rokeach, 1960; Leach, 1967). It has been suggested that individuals need this kind of restriction on their perceptual intake "as a defense against ego-involving situations which they find threatening" (Leach, 1967, p. 20). Frenkel-Brunswik (1954) hypothesized that rigid behavior patterns develop during the early socialization process when a child is forced to be submissive and obedient in response to authoritarian parents. Such a child is denied the opportunity to develop internalized values and instead, utilizes rote learning of behaviors to maintain parental approval, therefore becoming externally controlled. With a lack of internalized values, any complex, fast-changing or ambiguous situations become threatening and can only be defended against through the development of a ridig personality structure.

If the development of a rigid personality does serve as a defense against a threatening or ambiguous environment, then depression in response to stressful life events, may be viewed as a partial or complete disintegration of this aspect of the personality structure.

Significance of the Study

The alarming incidence of depression and the rate of reoccurrence of depression after an initial attack, reflects a need for continued investigation into this area.

An aspect which has seemed especially relevant to this writer in working with depressed patients at the Edmonton General Hospital was the examination of personality rigidity as a variable in depression. The research demonstrating the relationship between individual

personality variables and depression has apparently ignored this factor.

The significance of a research study of this nature is considered viable for the understanding and treatment of depressive illness for two major reasons:

> First, since an observable personality pattern represents to a large degree the crystallization of underlying psychodynamic processes, agreement on the characteristics of such a pattern would offer significant aid to efforts to study psychological factors in the genesis of depression. Second, agreement on the existence of such patterns has a bearing on the investigation of genetic and biochemical factors in depression, since their presence would have to be accounted for in any coherent organic theory of etiology. (Chodoff, 1974, p. 55)

A delineation of "the psychological factors in the genesis of depression" would provide further insight into: (a) the successful treatment of a particular depressive episode, (b) the prevention of recurrent attacks of depression, and (c) the prevention of affective disorders in general.

Within the framework of this study, several issues have importance for this writer. If personality rigidity is a particular manifestation of the depressive syndrome, then these individuals should become less rigid as they become less depressed. On the other hand, if personality rigidity is a stable personality trait which contributes to the onset of depression (i.e., disintegration of an ego defense mechanism), then as individuals become less depressed they may become more rigid as this defense once again becomes functional.

Should the second hypothesis prove to be valid, a truly rigid individual is likely to be least helped by therapy programs designed to teach new and more effective coping skills. For a rigid individual, any attempt to abandon their usual coping mechanisms in favor of a more flexible approach is likely to be a threat in itself. The therapy programs would, therefore, necessarily have to focus initially on

reducing rigidity before attempting to teach new skills.

Purpose of the Study

This exploratory study was designed to investigate the following:

(1) identify if personality rigidity is a variable in depression,

(2) identify if there is an increase or decrease in personality rigidity as depression decreases.

Because the design of the study involved pre- and post-test measures, secondary investigations included:

(1) assessment of the efficacy of group therapy programs in relieving the symtomatology of depression,

(2) assessment of the efficacy of group therapy programs in reducing the number of problems perceived and reported by patients in the program.

In order to accomplish these purposes, the following instruments were utilized:

(1) The Beck Depression Inventory (Short Form) to determine the degree of depression as reported by the patient,

(2) The Mooney Problem Checklist (Adult Form) to determine the number of the patient's problems as he or she reports them.

(3) The Gough-Sanford Rigidity Scale to determine the degree of personality rigidity as reported by the patient.

The sample consisted of twenty patients admitted into the Day Therapy Program at the Edmonton General Hospital, whose primary diagnosis (made by the referring psychiatrist or physician) was that of "depression". Patients were individually administered the three test instruments shortly after their admission into the Day Therapy Program and were retested with the same instruments approximately one month later.

Definitions

Rigidity -- The definition of rigidity accepted in this study is that employed by Rokeach (1960) who described personality rigidity as:

> The resistance to change of single beliefs (or sets or habits) ... encountered in attacking, solving

or learning specific tasks or problems (p. 183).

Depression -- A major depressive episode is described in the Diagnostic and Statistical Manual of Mental Disorders (1980) in the following manner:

> The essential feature is either a dysphoric mood, usually depression, or loss of interest or pleasure in all or almost all usual activities and pastimes. This disturbance is prominent, relatively persistent, and is associated with other symptoms of the depressive syndrome. These symptoms include appetite disturbance, change in weight, sleep disturbance, psychomotor agitation or retardation, decreased energy, feelings of worthlessness or guilt, difficulty concentrating or thinking, and thoughts of death or suicide or suicidal attempts (p. 210).

Limitations and Delimitations of the Study

Limitations

(1) The Gough-Sanford Rigidity Scale, which is a subscale of the California Psychological Inventory, is not reported to be a highly reliable or valid test instrument (reliability and validity coefficients are presented in Chapter IV). This scale was selected by the author for the following reasons: (a) it has previously been utilized in research studies to measure the degree of personality rigidity as herein defined, (b) other available scales reviewed by the author reported to measure personality variables related to rigidity but not necessarily rigidity as a unique entity, (c) the Gough-Sanford Rigidity Scale is easily and quickly administered and the individual items are such that they can be understood by the majority of patients, and (d) the Gough-Sanford Rigidity Scale has a high degree of face validity to measure personality rigidity as herein defined.

(2) All of the test instruments utilized were self-administered and

therefore reflect the feelings, behaviors and problems which the patient is aware of and is willing to express at a given time.

(3) The sample consisted of patients admitted to the Day Therapy Program at the Edmonton General Hospital. No control or comparative groups were established and therefore the findings from this research cannot be generalized beyond this scope.

Delimitations

(1) The subjects who participated in this study were all diagnosed as "depressed" by the referring physician. Several factors were not controlled and include: (a) reliability of the diagnosis of depression, (b) type of depression, (c) secondary diagnoses, (d) medication usage by the patients, and (e) previous episodes of depression and treatment.

Organization of the Thesis

Following the introduction of the nature and purpose of the thesis in Chapter I, a review of related literature was presented in Chapter II, describing various theories of depression and research on the concept of personality rigidity. Chapter III constitutes a detailed description of the Day Therapy Program offered at the Edmonton General Hospital. In Chapter IV the design of the study was outlined, with details of subject selection, instruments utilized, and procedure followed. The results of data collection and analysis have been presented in Chapter V. Finally, a summary of findings, considerations to be drawn from these findings and implications for further research have been presented in Chapter VI.

CHAPTER II

THEORY AND RESEARCH

Symptomatology of Depression

Beck (1967), in reviewing the psychiatric literature and systematic studies designed to delineate the characteristic signs and symptoms of depression, describes these symptoms under four major headings: emotional, cognitive, motivational, physical and vegetative. Emotional manifestations are changes in the patient's feelings or changes in behavior that can be directly attributed to feeling states. Emotional symptoms include: dejected mood, negative feelings towards the self, reduction in expected gratification, loss of emotional attachments, crying spells and loss of the mirth response. The cognitive manifestations of depression are described as: the patient's distorted attitude towards himself (low self-esteem), negative expectations and pessimism in considering the future, self-blame and self-criticism, indecisiveness and distortion of body image. Motivational manifestations are defined in terms of consciously expressed strivings and desires. The motivations of depressed patients are seen as regressive in nature in that activities are more consistent with a child's role, rather than the role of an adult. These include: paralysis of the will, suicidal wishes, increased dependency, and avoidance, escapist or withdrawal wishes. The vegetative and physical symptoms of depression are loss of appetite, sleep disturbance, loss of sexual desire and increased fatigability.

Although there is general agreement in the literature that depression encompasses the above symptomatology, there is considerable heterogeneity of the depressions in terms of onset, course, duration,

specific characteristics and treatment responsivity (Beck, 1979). It is this heterogeneity which has led to the diverse theoretical speculations as to the causes of depression.

Major Theories of Depression

Historical Perspectives. The psychodynamic factors in depression have been of interest to clinicians and researchers since Abraham's first formal discussion of this entity in 1911. Early psychoanalytic theories of depression include: increased orality (Abraham, 1911), retroflected hostility (Freud, 1917) and, needs to manipulate significant others (Rado, 1928). Two factors have been ascribed a central role in depression by these and later psychoanalytic writers -- aggression and orality.

Freud (1917) described the orally fixated personality as being literally oral, exhibiting:

> an undue amount of behavior centered on the mouth and alimentary system derived from a combination of constitutional accentuation of this stage and severe narcissistic disappointments in the relationship to the mother during the pre-Oedipal period. (Chodoff, 1974, p. 63)

Depression, therefore, represents a regression to an infantile stage in which the individual identifies with the loved object by swallowing it.

Similarly, Abraham (1948) views the orally fixated person as one who has great oral needs manifested by sucking, eating and use of the jaws, who possesses insatiable needs for orally expressed affection and who is highly sensitive to oral frustration.

The concept of orality in recent psychoanalytic theory has lost its early identification with psychosexual and constitutional factors

and is now synonymous with traits of excessive dependency, exaggerated affectional and supportive needs and, a reliance on the approval and support of others for the maintenance of self-esteem (Chodoff, 1974).

The depressive's feelings of bitterness, resentment, dislike of self and suicidal ideation were originally thought to be central to the development of depression and a manifestation of hostility towards others that had been turned against the self (Freud, 1917; Rado, 1928). Rado stated that the depressive is a person:

> with intense narcissistic needs and precarious self-esteem who, when he loses his love object, reacts first with angry rebellion and then tries to restore his self-esteem by the punishment of his ego (which includes the introjected bad part of himself) by his superego. (in Beck, 1970, p. 246)

More recently, however, several writers have considered aggressive responses as reactions to, rather than the essential elements of depression (Balint, 1952; Bibring, 1953). Cohen (1954) argues that the hostility exhibited by the depressed patient is due to his annoying impact on those around him rather than a motivation to hurt them. Beck (1970) regards suicidal wishes as the depressive's extreme expression of the desire to escape, to end suffering and to relieve the supposed burden on the patient's family or significant others.

Psychodynamic Theories. Cohen et al (1954) intensively studied a group of twelve manic-depressives and delineated a premorbid personality structure characterized by "denying the complexity of people and seeing them as either all white or all black" (Beck, 1970, p. 250). This denial of the complexity of people was viewed as a defense mechanism learned in childhood. The patients typically had parents

where the mother was stronger and tended to deprecate the father. The parents' approval of the children was contingent upon the child's accomplishments in gaining social status and prestige. As a result, the adult character develops as a person who is,

> conventionally well-behaved and frequently successful and he is hard working and conscientious; indeed his overconscientiousness and scrupulousness lead his being called obsessional. (Chodoff, 1974, p. 63)

These individuals were also viewed as being involved in relationships of extreme dependence.

Hubert Tellenbach (1961) presented an analysis of the case histories of one hundred and forty depressives and argued that they all had a relatively uniform premorbid personality structure. He described the life and work of the depressive as being:

> dominated by a strict order: orderliness in dealing with things, conscientiousness in his work, an overriding need to do right to those close to him. He has a great sensitivity to the do's and don'ts, the should and should nots ....he has a great sensitivity to guilt. He devotes his life to fulfilling his sense of order and to avoiding situations of guilt. (Beck, 1970, p. 67)

The depression-prone individual is extremely sensitive to guilt and therefore, will do anything to keep up his obligations. On the other hand, the individual has such a precise interpretation of his obligations that maintaining these self-imposed standards is extremely difficult. With such a fine balance, any accidental or stressful situation could result in not meeting obligations and depreciating the sense of fulfillment. It is this discrepancy between what the individual is able to do and what he feels he "should" do, combined with the guilt of not meeting expectations, which precipitates the

onset of depression.

Behavioral Theories. Clinical depression has been conceptualized in the three major behavior models of Ferster (1973), Lewisohn (1974) and Seligman (1974). These models have two things in common: (1) it is assumed that the antecedents of depressive affect and behavior are similar and, (2) the models describe depressive behavior in terms of descriptive characteristics and functions (the relation between antecedent conditions and affective behavior) (Heiby, 1979).

Ferster (1974) argues that depression is the result of extinction of several classes of behavior and the possible reinforcement of depressive behaviors. In general, he discusses environmental conditions which reduce the probability of positively reinforced behaviors. These conditions include: (1) reinforcement schedules requiring large amounts of behavior to produce a relative change in the environment and elicit reinforcement, (2) changes in the environment which remove discriminative stimuli of sources of reinforcement, (3) a reduction in the probability of self-reinforcement, (4) negative reinforcement of depressive behaviors, and (5) punishment of large segments of an individual's behavioral repertoire (i.e. loss of a loved one, being fired from a job).

Seligman (1974), in his learned helplessness model of depression, contends that it is not a specific trauma per se that interferes with adaptive responding, but the critical factor is not having control over the phenomena itself. The depressed person is one who has learned or believes that there is no control over those elements of life that relieve suffering or bring gratification. In behavioral terms, the individual learns through early life experiences that responding and

reinforcement are independent, which result in failure to discriminate situations where reinforcement is, in fact, response contingent. The individual learns that his behavior has little impact on the environment and therefore becomes overwhelmed and immobilized in the face of trauma.

Lewisohn (1974) maintains that a low rate of environmental response-contingent, positive reinforcement is the one antecedent condition which is common to all depressions. Like Ferster (1974), he believes that the positive reinforcement of depressive behaviors may increase the frequency of those behaviors especially when an individual lacks the social skills required to elicit reinforcement for more adaptive, appropriate behaviors.

Cognitive Theories. Aaron T. Beck (1967, 1970, 1979) is the major proponent and most prolific writer on the cognitive theory of depression. He maintains that the depressive-prone individual is one who, during the early developmental period, acquires certain negative attitudes or cognitive sets about himself, the outside world, and the future. These concepts are drawn from experiences, from attitudes and opinions communicated by others and from early identifications with significant others; all of which are perceived as having a negative value judgment by the individual. Unless extinguished, the concepts become structuralized; a permanent formation in the cognitive organization. Beck (1979) uses the term "schema" to refer to these stable cognitive patterns. The negative schemas of a depression-prone individual may not be prominent at a given time but can persist in a latent state ready to be activated, leaving the person particularly sensitive to certain specific stresses such as being deprived,

thwarted or rejected. When exposed to such stresses, the overwhelming idiosyncratic ideas of personal deficiency, pessimism and self-blame are evoked. As Beck (1970) explains,

> the traumatic situations initially responsible for embedding or reinforcing the negative attitudes that comprise the depressive constellation are the prototypes of the specific stresses that may later activate these attitudes. (p. 278)

When a person begins slipping into a depression they may withdraw from significant others. Once alienated, the significant others may respond with rejections or criticisms, which in turn aggravates the person's own self-rejection or self-blame leading to further isolation. Beck (1979) identifies this aspect as a "reciprocal interaction model".

Summary. It is apparent from the above review of the various theories of depression that there is considerable controversy and research directed towards delineating the personality characteristics, antecedent conditions and environmental influences which precipitate the onset of depression. The author contends that personality rigidity may be one such variable which heightens an individual's sensitivity to becoming depressed. The next section presents a review of the research on the concept of personality rigidity.

Rigidity as a Personality Variable

The concept of rigidity has been the subject of a great deal of research beginning in 1927 when Spearman first noted the perceptual behavior of perseveration in laboratory studies. Numerous definitions of rigidity are found in the literature as the term has been used to describe variety of behavior patterns characterized by inability to

change habits, sets, attitudes and discriminations (Chown, 1959). The phenomena of rigidity has been studied as, "a neurologically determined peculiarity of perception, as a type of perceptual defense and as a manifestation of basic personality variables" (Leach, 1967, p. 11). As a result of these diverse applications and investigations of the concept of rigidity, there is still little agreement as to its identity or components (Leach, 1967).

Historically, there have been two schools of thought regarding the concept of rigidity. One group considers rigidity to be a general personality factor which is evident in every sphere of life, while the other group considers rigidity to be a task specific, field dependent factor (Stewin, 1968). An examination of the evolution of these two opposing viewpoints is beyond the scope of this presentation and therefore, only the former view of rigidity as a general personality factor will be explored.

Cattell (1935) was the first to attach the label of "rigidity" to perseveration perceptual behavior. His work led to a distinction between "the inertia of mental processes" which is evident when an individual is required to alternate between two previously rehearsed motor skills, and "disposition rigidity" which is displayed when a familiar task has to be performed in a new way. Although he noted extensive individual differences in degrees of perseveration, Cattell (1935) surmised that extreme disposition rigidity was related to such personality factors as passivity, submissiveness and lack of character integration.

In later investigations Cattell and Tiner (1949) elaborated on two types of behaviors which had previously been categorized as

"perseveration". The first type is "process rigidity" which is the tendency of a familiar response to continue in the presence of a new stimulus. Cattell and Tiner (1949) describe "structural rigidity" as the resistance to change of a habit or personality trait even though a more rewarding response to a stimulus could be made. In discussing the causes of structural rigidity, Cattell and Tiner (1949) rely on the earlier concept of disposition rigidity which was identified as a resistance to change of neural discharge paths. Other causes of structural rigidity were hypothesized to be: a lower level of intelligence, defective strength of motivation and conflicting motives.

In an analysis of the thinking processes of ethnocentric individuals, Rokeach (1948) hypothesized that:

> (1) individuals who are rigid in solving specific social problems (as measured by an attitude scale) also show up as rigid in solving non-social problems, and
>
> (2) there is a general rigidity factor. (p. 260)

Rokeach confirmed the above hypotheses in his study, which led him to conclude that one of the characteristics of ethnocentric thinking is a rigidity and inflexibility of the thinking processes and that this is a general personality factor.

Research in psychoanalysis led Frenkel-Brunswik (1948a) to investigate the concept of rigidity which she termed "an intolerance of ambiguity". She found that individuals varied in their tolerance of emotional ambivalence in the self and that this was related to a dislike of conflict in other social areas and, was also reflected in the cognitive and perceptual processes. Frenkel-Brunswick (1948b) concluded that rigid perceptual behavior was a manifestation of total personality structure. The results of her study demonstrated that

highly prejudiced children (social prejudice being an aspect of social rigidity) displayed marked perceptual rigidity and also had many characteristics which she found to be typical of authoritarian personalities.

Cowen and Thompson (1951) hypothesized that psychological rigidity, as a generalized response characteristic, pervades all aspects of an individual's behavior, i.e. perception, problem-solving, emotions, motor responses, social responses, etc. Utilizing a water jar test of Einstellung (problem-solving) rigidity, two personality inventories and the Rorschach, the authors confirmed their hypothesis that rigidity is a general factor in personality organization and functioning. It was also found that, on the basis of Rorschach responses, the rigid group of subjects were lower in personal adjustment than the flexible group.

Cowen, Weiner and Hess (1953) administered an Einstellung test in the form of an alphabet maze, as well as the water jar test, to investigate the concept of a personality related mode of problem-solving behavior. A low but significant correlation was found between rigidity scores on the two tests which led the authors to conclude that a generalization of specific problem-solving rigidity had been demonstrated. Although caution was stressed in generalizing the results, it was indicated that,

> under such conditions in the present study, a tendency towards a generalized mode of problem-solving has been demonstrated, and the likelihood that this tendency is "personality-related" strengthened. (Cowen, Weiner, and Hess, 1953, p. 102)

Schmidt, Fonda and Wesley (1954) conducted a study to refute earlier statements that problem-solving rigidity was a function of

particular field conditions rather than a pervasive personality factor. From a statistical analysis performed on the results, the authors concluded that rigidity was a consistent personality trait.

Rubenowitz (1963) examined several aspects of social rigidity-flexibility and hypothesized that:

> the way a person behaves or thinks in one situation is not an isolated phenomena within the personality, but rather an aspect of a general fundamental factor. (p. 230)

His study confirmed this hypothesis leading him to conclude that a flexibility-rigidity factor in personality can be identified and this factor contributes to individual variance in thinking, attitudes and observable behavior. Rubenowitz (1963) disagreed with Rokeach's (1960) contention that this factor was restricted to the affective or social areas of an individual's life (such as attitudes) rather than influencing every sphere of the person's existence.

The above studies have all attempted to demonstrate that rigidity is a generalized personality dimension and not simply a task specific, field dependent factor. The following section presents the basis for consideration of personality rigidity as a significant factor in an individual's susceptibility to becoming depressed.

Personality Rigidity and Depression

To this author's knowledge, virtually no systematic research has been conducted investigating the relationship of personality rigidity as a variable in depression. Some related studies, however, have indirectly examined this relationship.

Leeb (1975) argues that psychology should be based on constructs independent of objective environmental meaning and maintain that:

> it is only in terms of constructs defined with respect to individuals and varied over individuals which will generate psychological laws or possible relationships. (p. 652)

In studying four such constructs in relation to personality variables, Leeb (1975) concluded that personality rigidity (as measured by Authoritarianism and Dogmatism scales) was negatively associated with the number of perspectives an individual has. The number of perspectives was related to the amount of subjective information available and how the information is grouped. In other words, those subjects scoring high on the rigidity scales made limited use of the amount of information available in adapting to task demands.

Stockton (1975) compared a group of depressives and a group of non-depressives in order to, "determine if there was a depressive life style characterized by certain behavior patterns found in people with depressive neurosis" (p. 1420). He concluded that the depressed group was characterized by a depressive life style which included such behavior patterns as: inability to express feelings, blocked expression hostility, dependency and rigidity.

In a study of sex role acceptance and depression in middle aged women, Young (1975) predicted that,

> the recently widowed or divorded woman is likely to manifest a higher degree of depression than is her married counterpart and that this relationship will be stronger for women who manifest (a) a higher degree of traditional sex role acceptance, (b) a higher degree of rigidity, and (c) a higher degree of dependency. (p. 4068)

The results supported the hypothesis that divorced or widowed women who exhibit a higher degree of traditional sex role acceptance manifest a higher degree of depression. No significant difference in

dependency and rigidity was found between the two groups of women.

While the above studies are certainly inconclusive in demonstrating personality rigidity as a factor in depression, throughout the theoretical literature on depression considerable emphasis is given to behavioral descriptions of rigidity. Similarly, studies of the underlying causes of rigid behavior can be linked to the development of depression.

There is general agreement in the psychiatric literature about the type of premorbid personality susceptible to the development of involutional depression (Chodoff, 1974). It is said to occur primarily in individuals of obsessive personality makeup described by Noyes (1939) as:

> an inhibited type of individual with a tendency to be quiet, unobtrusive, serious, chronically worrisome, intolerant, reticent, sensitive, scrupulously honest, frugal, stubborn, of stern unbending moral code, lacking humor, over-conscientiousness ... often his interests have been narrow, his habits stereotyped, he has cared little for diversion, has avoided pleasure and has few close friends. (in Chodoff, 1974, p. 56)

Ayd (1961) agrees that the personality of depressives is often obsessional and his lengthy description of the character traits coincide with Rokeach's (1960) definition of social and behavioral rigidity. Many of these traits are also reflected in the items of the Gough-Sanford Rigidity Scale, utilized by Rokeach to measure personality rigidity. Ayd (1961) states that depressive individuals are:

> known for their conscientiousness and reliability ... being late is distasteful ... they are perfectionistics ... exactness, orderliness, neatness are outstanding traits ... they refrain from speaking their minds and keep things inside rather than starting an argument ... they are

> slaves to routine and cannot alter their habits ... their rigidity is such that they often have strained interpersonal relations ... they lack confidence in their ability, are prone to check and recheck, to be more thorough than necessary and to seek advice and reassurance from others ... they are submissive many times against their better judgment ... the aggression of these people is directed towards themselves in the form of self-imposed, unrealistic standards. (p. 4, 5 and 6)

Ayd (1961) indicates that while many normal individuals manifest the above character traits, for the depression-prone individual, these traits are pervasive.

As indicated previously, the behavioral descriptions of the premorbid personalities of depressives presented by Cohen et al (1954) and Tellenbach (1961) are closely aligned with the above.

As social rigidity is considered to have its roots in personality development, several researchers have endeavored to determine the conditions which occasion the development of rigidity. Frenkel-Brunswik (1949) describes the kind of parent who seems to produce rigid children:

> the requested submission and obedience to parental authority is only one of the many external, rigid and superficial rules such a child learns ... dominance-submission, cleanliness-dirtyness, badness-goodness, virtue-vice, masculinity-femininity are some of the dichotomies upheld in such a home. (in Leach, 1967, p. 20)

She believed that during the early socialization process, these parents made behavioral demands on their children which could neither be understood nor achieved. Faced with these bewildering standards, the child could only maintain parental approval by blind obedience and rote learning of expectations. Without comprehension of the reasons for expected behavior, the child was taught to conform to

external demands without developing foundations in internalized values. The result of such learning is a rigid system of defenses within the self:

> with black and white as recognizable and manageable dichotomies, and grey the color of threat; where piecemeal learning gave no cues and the lack of internalized values left the child threatened with complete disintegration of his defensive structure. (Leach, 1967, p. 21)

Frenkel-Brunswik (1954) further hypothesized that a child's normal ambivalent feelings towards the parents are not allowed expression in such an environment. This leads to the development of:

> a generalized need to structure the world ridigly, a pervasive tendency to permature closure and a general intolerance of cognitive ambiguity. (Rokeach, 1960, p. 17)

The rigid personality, therefore, has many traits in common with the previously described depression-prone personality, i.e. externally controlled, dependent, conventionally well-behaved and submissive to the authority of others.

Although Beck (1967, 1976) described similar rigid behavior in depressed individuals, he views the causes of such behavior somewhat differently. The depression-prone individual is one who has become sensitized by certain unfavorable traumatic experiences during childhood. These experiences cause the individual to judge himself in a negative manner. When analogous conditions occur later in life, the individual "has a tendency to make extreme absolute judgements" (Beck, 1976, p. 108). Like Tellenbach (1961), Beck (1976) believes that:

> other depression-prone people sit rigid, perfectionistic goals for themselves during childhood, so that their universe collapses

> when they confront inevitable disappointments later in life. (p. 108)

When losses or disappointments occur, the normally dormant negative schema surface and begin to override the person's thoughts. Beck (1976) identifies these repetitive ideas as a perseveration of idiosyncratic schema which determine the affective symptomatology of depression.

In summary, while little research has been directed towards establishing a relationship between personality rigidity and susceptibility to clinical depression, extensive behavioral descriptions of rigidity are found in the theoretical literature on depression. The present study explored the possibility of the existence of such a relationship. Patients participating in the study were involved in the Day Therapy Program at the Edmonton General Hospital. The following is a description of this program.

CHAPTER III

THE EDMONTON GENERAL HOSPITAL: DAY THERAPY PROGRAM

Introduction

The Day Therapy Program offered by the Department of Psychiatry at the Edmonton General Hospital is designed to utilize "the group approach and various activities to help the participant recognize and cope with interpersonal and emotional difficulties" (brochure distributed by the General Hospital). The program accommodates a maximum of twenty-five patients at any one time and each patient is involved on a daily basis (Monday to Friday) for four to six weeks, depending on individual needs and progress. The minimum age of participants is seventeen years and there is no maximum age. Patients are admitted and discharged on an ongoing basis.

Referrals

Psychiatrists and general medical practitioners will refer selected patients to the Day Therapy Program who they feel can benefit from the various activities offered. Referring doctors generally consider the following criteria: (1) the patient is suffering from an affective or social adjustment disorder, (2) the patient's present coping skills are ineffective, (3) the patient is aware of the need to learn more effective skills and is motivated to do so, (4) the patient does not require hospitalization (at the point of referral) but requires more intensive treatment than can be offered on a private basis, and/or (5) the patient requires an intensive follow-up program subsequent to psychiatric hospitalization.

When referrals are received at the hospital, they are priorized

in the following order: (1) in-patients from the psychiatric units at the General Hospital, (2) clients who are receiving psychiatric services on an out-patient basis from those psychiatrists who have admitting privileges at the General Hospital; (3) patients of the general practitioners who have admitting privileges at the General Hospital, and (4) patients referred from the medical community at large.

Prior to being admitted to the program, candidates are individually interviewed by any one of the five nurses who are part of the treatment team. Participants are selected on the basis of the following factors: motivation to attend and become actively involved in the program, sufficient intellectual ability to benefit from the information and experiences offered, and ability to identify individual therapeutic needs and goals. Patients are not admitted into the program if the referring physician describes them as being "actively psychotic". Also not admitted are those patients whose primary problem is alcohol or drug abuse or whose psychiatric illness has been diagnosed as mainly organic in nature.

The Therapy Team

The group leaders include: nurses, social workers, psychologists, dieticians, psychiatrists and manpower counselors. The nursing supervisor is responsible for timetabling the various groups and assigning therapists to the groups, as well as assigning the nursing staff to act as "primary therapists" for the patients. The role of primary therapist involves: conducting the initial interview to determine suitablility for the program, outlining treatment goals with each candidate, assessing progress, providing a liaison with psychiatrists and support personnel (i.e., social workers, manpower counselors),

selecting appropriate groups to be attended by each patient, arranging discharge and follow-up programs if necessary and, acting as a resource or support person.

The Therapy Program

The total program is designed to provide:

> each person with the opportunity to increase self-confidence and awareness, affect a more acute understanding of self and others, identify and resolve problems, make decisions and cope with responsibilities on a mature basis, reach logical conclusions, become adept at recognizing and expressing feelings in a healthy way, and to improve ability to communicate effectively. (brochure distributed by the General Hospital)

The underlying philosophy of the program is that most behavior patterns and emotional responses are learned and experienced in a group setting and therefore, the group setting provides an effective means of exploring difficulties in these areas.

A wide range of group experience is offered and includes such areas as: assertiveness training, applied social skills, relaxation therapy and stress management. The group structure varies from information sharing (human sexuality), to insight orientation (groups A and Z) and to utilizing specialized therapy techniques (gestalt, cognitive therapy). An example of one week's group schedule and the hospital brochure are presented in Appendix A.

CHAPTER IV

DESIGN OF THE STUDY

Subjects

The subjects of this study were patients accepted into the Day Therapy Program at the Edmonton General Hospital, whose primary diagnosis by the referring physician was that of "depression". There were twenty subjects involved in the study; sixteen females and four males. The subjects ranged in age from 19 to 52 years with the mean age being 34.4 years.

Test Instruments

Beck Depression Inventory (Short Form)

The short form of the Beck Depression Inventory (BDI) was developed by Beck and Beck (1972) to aid clinicians, general practitioners, and researchers in the rapid screening of depressed patients. This short form is an abridged version of the original inventory which consists of twenty-one categories of symptoms designed by Beck in 1972. In determining the reliability of the original form, Beck (1972) utilized a test-retest method combined with psychiatrist ratings of the depth of depression. Beck (1974) reports that, "we found that changes in the DI scores paralleled changes in the clinical ratings of the depth of depression" (p. 157). Numerous construct and concurrent validity evaluations have been carried out on the original version of the BDI and all studies provide strong support for the validity of this inventory (Beck, 1974).

The short form of the BDI is a thirteen item scale which is self-administered. The items cover the following categories: sadness,

pessimism, sense of failure, dissatisfaction, guilt, self-dislike, self-harm, social withdrawal, indecisiveness, self-image change, work difficulty, fatigability and anorexia. Each item contains a group of four statements which are assigned values from 0 to 3, to indicate the degree of severity. The patient is asked to circle the number of the statement "which best describes the way you feel today". The maximum possible score is thirty-nine and the minimum possible score is zero. Cutoff points have been established to provide a guide to the severity of depression. The range of scores is as follows:

Range	Degree of Depression
0 - 4	none or minimal
4 - 7	mild
8 - 15	moderate
16 +	severe

The short form of the BDI correlates .96 with the original, lengthier form and .61 with clinicians' ratings of depression (Beck and Beamesderfer, 1974). The Beck Depression Inventory (Short Form) is found in Appendix B.

The Mooney Problem Checklist (Adult Form)

The Junior High School, High School and College forms of the Mooney Problem Checklist were developed in the early 1940's and revised in 1950. Part of this revision included the development of the Adult Form, for use with late adolescents and adults of a non-student population. The purpose of the Mooney Problem Checklists is, "to help individuals express their personal problems" (Gordon and Mooney, 1950). Because it is self-administered, the checklist is designed to reflect the problems which an individual is aware of and willing to express at a given time. The checklist consists of 288 statements, each

briefly describing a problem. The patients were instructed to underline the problems which were of concern to him or her and circle the ones of most concern.

The Adult Form of the Mooney Problem Checklist includes statements which are grouped into nine problem areas: health, economic security, self-improvement, personality, home and family, courtship, sex, religion and occupation.

Because of the nature and purpose of the Mooney Problem Checklists, statements about reliability and validity cannot be made in normally accepted manner. The checklists are designed to reflect problems, rather than to predict patterns of behavior or to arrive at a clinical diagnosis. The authors have positively evaluated the purposes for which the checklists were intended, i.e. responsiveness to the items, coverage of an adequate range of problems, constructive attitudes (individuals appreciate the opportunity to express their problems in such a manner), acceptance of the checklists by educators, counselors and clinicians and, usefulness in research (Mooney and Gordon, 1950). In a test-retest study with college students, the frequency with which each of the items was marked on the first administration positively correlated with items marked on the second administration ($r=.93$) (Mooney and Gordon, 1950). The Mooney Problem Checklist-Adult Form is found in Appendix C.

The Gough-Sanford Rigidity Scale

The Gough-Sanford Rigidity Scale was constructed in 1952 and was incorporated into the California Psychological Inventory in 1956. At that time the rigidity scaled was renamed Flexibility and the direction of scoring was changed in order to make it consistent with

the other scales. The scale was designed to measure "inflexibility of thought and manner and resistance to change" (Megargee, 1972, p. 80). The revised edition of the CPI Manual (1975) describes the thinking and social behavior of low scores on the flexibility scale as:

> deliberate, cautious, worrying, industrious, guarded, mannerly, methodical and rigid: as being formal and pedantic in thought; and as being overly differential to authority. (p. 11)

The Gough-Sanford Rigidity Scale is a twenty-two item inventory which is self-administered. A Likert method of scaling was employed to approximate the investigations of Rokeach (1960) and Stewin (1968) who utilized this instrument to measure "resistance to change of single beliefs or habits" (Rokeach, 1960, p. 183). Subjects were asked to indicate the extent of their agreement with each item or statement by circling the appropriate number on a scale of -3 (strongly disagree) to +3 (strongly agree). The maximum possible score is +66 and the minimum possible score is -66.

The test-retest method was utilized in reliability studies on the various scales of the California Psychological Inventory. Test-retest correlations for the three studies cited in the CPI Manual on the Flexibility Scale are .67, .60 and .49. In tests of the validity of the flexibility scale, scores correlated -.48 and -.36 with staffs' ratings of "rigidity" of college students. While reliability and validity coefficients of this instrument are not high, it was selected as the most suitable instrument for this study for reasons which were outlined in Chapter I.

The Gough-Sanford Rigidity Scale is found in Appendix D.

Procedure

Subjects for the study were identified by the nursing supervisor of the Day Therapy Program at the General Hospital. Patient's hospital charts were reviewed by the author to ensure that the primary diagnosis of each patient was "depression". Patients were initially tested at the hospital during their first week in the Day Therapy Program and retested at the hospital approximately one month later. All patients were tested individually by the author.

It was explained to each patient that the author was conducting a research study designed to measure the patient's progress during his or her involvement in the Day Therapy Program. Test instruments were identified and instructions given in the following order: Beck Depression Inventory (Short Form), Gough-Sanford Rigidity Scale, and Mooney Problem Checklist (Adult Form). Testing time varied from thirty to sixty minutes per patient.

Treatment of the Data

The following statistical procedures were utilized in order to analyze the data collected from the study:

(a) Pearson Product-Moment Correlation in order to determine the degree of relation between the three pre-test and the three post-test dependent variables.

(b) Analysis of variance with repeated measurements to test the significance of the differences between the means of the pre- and post-test measures.

The Null Hypotheses being tested in this study were:

Hypothesis I: No significant difference exists between patients' pre- and post-test scores of severity of depression.

Hypothesis II: No significant difference exists between patients' pre- and post-test scores of personality rigidity.

Hypothesis III: No significant difference exists between patients' pre- and post-test scores of reported problems.

CHAPTER V

RESULTS

Overview

One major and two secondary hypotheses were constructed for the purpose of this study: to identify if personality rigidity is a factor in depression and to identify if a group therapy program is effective in relieving the symptomatology of depression and reducing the number of problems as reported by the patients.

Statistical analysis of the data obtained from the pre- and post-tests of the Beck Depression Inventory, the Gough-Sanford Rigidity Scale and the Mooney Problem Checklist included the following calculations:

(1) Pearson Product-Moment correlation coefficients to determine the degree of relation between the dependent variables;

(2) analysis of variance with repeated measurements to test the significance of the differences between the pre- and post-test measures of depression, personality rigidity and reported problems.

Statements of an appropriate conclusion follows pertinent statistical findings from the calculations indicated above.

Rigidity as a Variable in Depression

(a) Findings

The Gough-Sanford Rigidity Scale was utilized as a measure of personality rigidity. The Pearson correlation results indicate that no relationship exists between personality rigidity and depression or

between personality rigidity and number of reported problems on the pre- and post-test measures. The results of the Pearson correlations of the rigidity factor with the pre- and post-test measures of depression and reported problems are presented in Table I.

The analysis of variance performed on the data illustrates that no significant difference exists between the means of the pre- and post-test measures of personality rigidity. In fact, there was approximately only a one point difference. These results are presented in Table II.

(b) Conclusions

The relationship between personality rigidity and depression was not significant at the .05 level of confidence, nor is there a significant relationship between rigidity and number of reported problems.

Personality rigidity appears to be unrelated to depression and number of problems.

Reported Problems as a Variable in Depression

(a) Findings

The Mooney Problem Checklist and the Beck Depression Inventory were utilized, respectively, to measure number of reported problems and degree of depression. The Pearson correlation coefficient results indicate that a significant relationship exists between reported number of problems and depression. These results are presented in Table III.

(b) Conclusions

There is a significant positive relationship between numbers

TABLE I

PEARSON CORRELATION COEFFICIENTS: RIGIDITY

Tests	Depression Pre	Rigidity Pre	Problems Pre	Depression Post	Rigidity Post	Problems Post
Depression Pre	1.000				-.2987 p=.201	
Rigidity Pre	- .1560 p=.511	1.000	-.2192 p=.353	-.0262 p=.913	.7630 p=.000*	-.0731 p=.759
Problems Pre			1.000		-.1359 p=.568	
Depression Post				1.000	-.1259 p=.597	
Rigidity Post					1.000	
Problems Post					.0327 p=.891	1.000

1) Correlation Coefficient
2) Level of Significance
3) Significance Values *p $<$ .05

TABLE II

A. CELL VALUES FOR RIGIDITY SCORES

TEST	N	MEAN	STANDARD DEVIATION
Pretest	20	17.050	17.157
Posttest	20	16.350	15.356

B. SUMMARY OF ANALYSIS OF VARIANCE OF RIGIDITY SCORES

VARIABLE	SOURCE OF VARIATION	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F RATIO	P
Rigidity	TRIALS	4.902	1	4.902	.077	.785
	ERROR	1217.098	19	64.058		

TABLE III

PEARSON CORRELATION COEFFICIENTS: DEPRESSION AND PROBLEMS

	DEPRESSION PRE	PROBLEMS PRE	DEPRESSION POST	PROBLEMS POST
Depression Pre	1.000	.7151 p .001 *	.6940 p .001 *	.5389 p=.014 *
Problems Pre		1.000	.6168 p=.004 *	.8667 p .001 *
Depression Post			1.000	.7051 p .001 *
Problems Post				1.000

1) Correlation Coefficient
2) Level of Significance
3) Significant Values *p < .05

of reported problems and degree of depression ($p < .05$).

Efficacy of the Day Therapy Program

(a) Findings

The results of the analysis of variance on the pre- and post-test measures of depression and number of problems indicate that a significant difference exists between the pre- and post-test measures of both variables. These results are presented in Tables IV and V, and graphically represented in Figures I and II.

(b) Conclusions

The patients were significantly less depressed and reported significantly fewer problems after approximately one month's involvement in the Group Day Therapy Program ($p < .05$).

TABLE IV

A. CELL VALUES FOR NUMBER OF PROBLEM SCORES

TEST	N	MEAN	STANDARD DEVIATION
Pretest	20	66.20	32.499
Posttest	20	49.90	32.667

B. SUMMARY OF ANALYSIS OF VARIANCE OF NUMBER OF PROBLEM SCORES

VARIABLE	SOURCE OF VARIATION	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F RATIO	P
Number of Problems	TRIALS	2656.953	1	2656.953	18.921*	.001
	ERROR	2668.063	19	140.424		

TABLE V

A. CELL VALUES FOR DEPRESSION SCORES

TEST	N	MEAN	STANDARD DEVIATION
Pretest	20	13.400	7.429
Posttest	20	9.850	7.485

B. SUMMARY OF ANALYSIS OF VARIANCE OF DEPRESSION SCORES

VARIABLE	SOURCE OF VARIATION	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARES	F RATIO	P
Depression	TRIALS	126.025	1	126.025	7.357*	0.14
	ERROR	325.477	19	17.130		

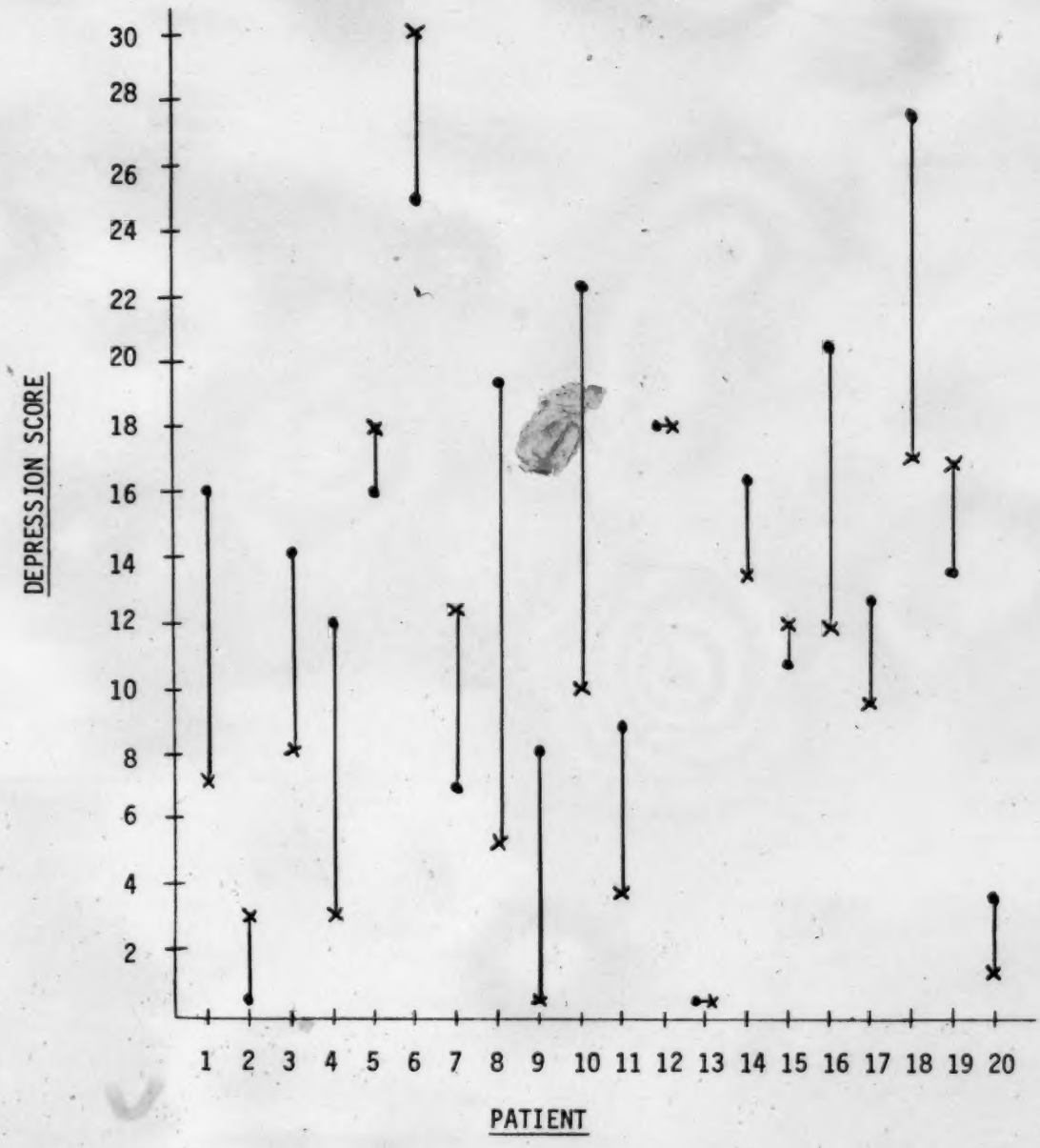

FIGURE 1. Pre- and Post-test Beck Depression Inventory Scores

● pre-test score
✱ post-test score
(n=20)

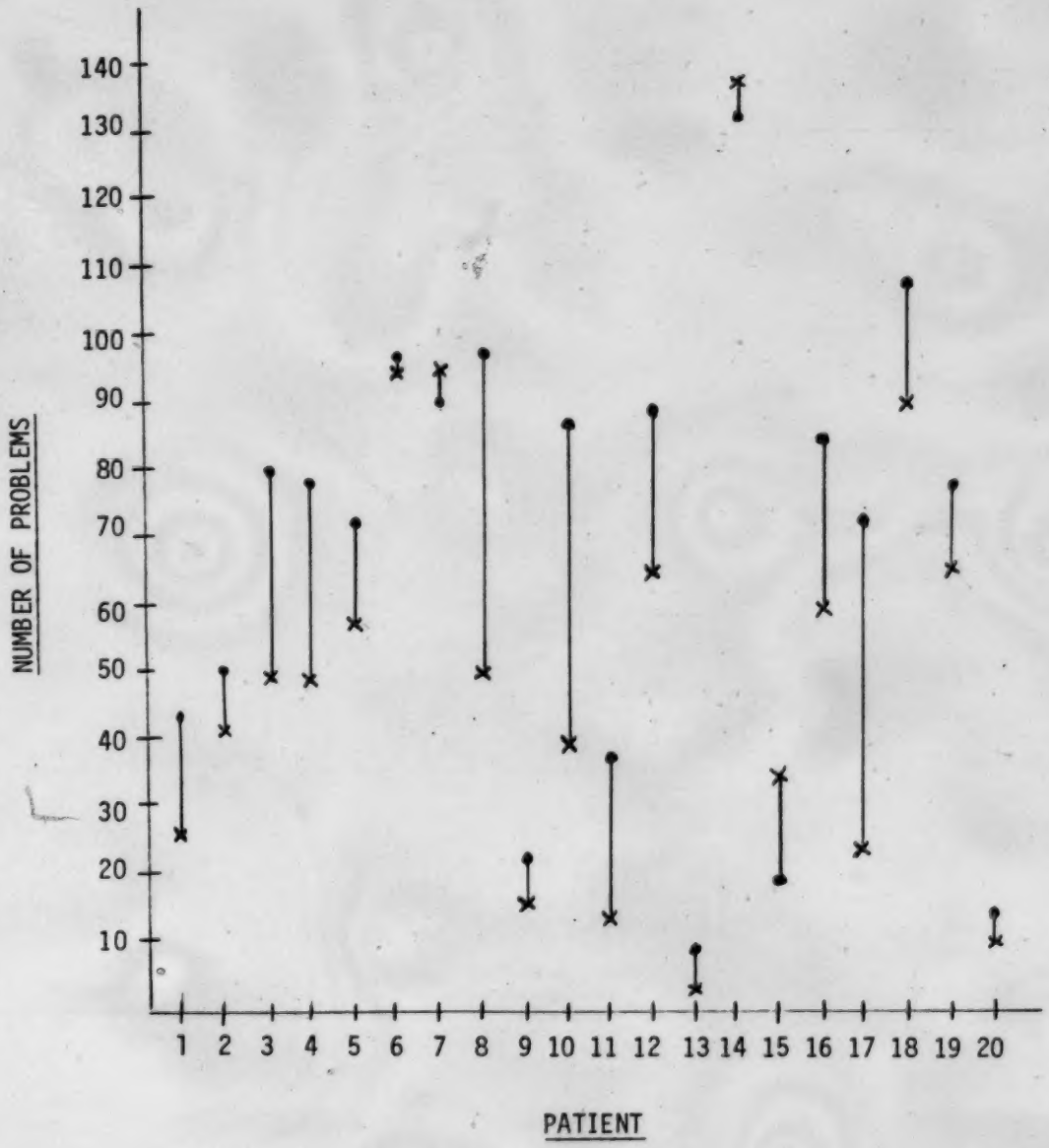

FIGURE 2. Pre- and Post-test Mooney Problem Checklist Scores

● pre-test score
✱ post-test score
(n=20)

CHAPTER VI

CONCLUSION AND DISCUSSION

Rigidity as a Variable in Depression

The major purpose of this study was to determine if personality rigidity is a variable in depression. Results of the Pearson Product Moment Correlation Coefficient indicate that no significant relation exists between rigidity as measured by the Gough-Sanford Rigidity Scale and depression, as diagnosed by the referring physician. The analysis of variance of the pre- and post-test scores of personality rigidity reflect insignificant changes in these scores during the one-month treatment time.

A number of possible factors might reasonably be assumed to account for these insignificant results. The most obvious factor is, of course, that there is indeed no relation between personality rigidity and depression. If, however, there is a relationship as the theoretical literature suggests, the lack of significant results may be attributed to the experimental design and test instruments utilized.

As indicated previously, several factors could not be controlled, including type and severity of depression of the subjects. It is possible that personality rigidity may be related to one or two specific types of depression (i.e. involutional, manic-depressive) and not to others (i.e. chronic, endogenous depression or simple reactive depression). This leads to the question of whether or not it is even possible to diagnostically differentiate the various manifestations of the depressive syndrome as suggested above, or, should depression be viewed as a continuum which extends from

everyday sadness to severe melahcholia? If one chooses the second alternative, then it could be hypothesized that personality rigidity may be more characteristic of patients closer to one pole of the continuum, rather than the other. The point is, the diagnostic controversy which stems from the wide range of manifestations of clinical depression can seriously limit the factoring out and identification of specific related personality variables; especially when a small sample is studied.

A second difficulty, which may account for the lack of results centres around the use of the Gough-Sanford Rigidity Scale as a valid measure of personality rigidity. As the Pearson Correlation results indicate, this instrument has a relatively high test-retest reliability (r=.76). While this scale has a certain amount of face validity, the reported validity in the California Psychological Inventory Manual (1975) is relatively low. In other words, the Gough-Sanford Rigidity Scale is probably not a totally adequate measure of personality rigidity as observed in individuals.

Reported Problems as a Varible in Depression

A secondary purpose of this study was to determine if the number of problems perceived and reported by patients was related to severity of depression. Results of the Pearson Product Moment Correlation Coefficient indicate that the number of reported problems by patients was positively and significantly correlated with depression. That is, those patients who were less depressed reported having fewer problems, while those patients who were more depressed reported a greater number of problems. Also, those patients whose depression

scores were lower on the post-test reported fewer problems on the post-test.

These findings are consistent with most theories of depression and are directly related to the symptomatology of depression as summarized by Beck (1967). For the depressed individual, the symptoms are manifested in the emotional, cognitive, motivational and physical aspects of coping with day to day living. Beck (1979), in his cognitive model of depression encompasses these manifestations in what he terms "the cognitive triad" (p. 11). The cognitive triad consists of three major cognitive patterns which induce the patient to regard himself, his environment and his future in an idiosyncratic, negative manner. The 288 problem statements of the Mooney Problem Checklist thoroughly covers each of these areas and one can therefore, easily perceive the direct relationship between number of reported problems and severity of depression in light of Beck's theory.

Efficacy of the Day Therapy Program

Because the design of the study involved pre- and post-test measures of patients in the Day Therapy Program at the Edmonton General Hospital, a final purpose of this study was to assess the efficacy of the treatment program in relieving the symptomatology of depression. Results of the analysis of variance of the pre- and post-test scores of number of reported problems and degree of depression indicated that patients were significantly less depressed and reported significantly fewer problems ($p < .05$) after one month's involvement in the treatment program.

A number of possible factors may have contributed to these positive and significant results. First, the Day Therapy Program

offers a wide variety of group experiences designed to: promote individual insight into ineffective behavior patterns and the psychological substrata of the depressive syndrome; teach more effective social skills and coping behaviors which enhance the individual's self-confidence, self-esteem and increases the opportunities for positive reinforcement from the self and others; teach problem-solving skills and, free the individual from his or her "history" to enable a more effective and rational approach to the "here and now". This eclectic program encompasses the therapies inherent in most of the recent theories of depression.

Secondly, the patients involved in the Day Therapy Program are necessarily aware of some of their ineffective behavior patterns and are motivated to take an active role in the therapeutic process.

Finally, most theorists and clinicians agree that many episodes of depression will subside with or without treatment, simply as a function of time. The relatively short period of time, however, between the pre- and post-test measures precludes this factor as being the probable cause for such significant overall results.

In summary, the results of this study indicate that the eclectic group therapy program offered by the Edmonton General Hospital, is a viable and effective treatment program for relieving the symptomatology of depression.

Summary and Implications for Further Research

Because of the sample group size and non-representativeness of the sample, it is not possible to generalize the results of this study to the population of all psychiatric patients diagnosed as "clinically depressed". For the group sampled however, personality rigidity is not

a factor in depression. On the other hand, this group of subjects successfully responded to an eclectic group therapy program designed to alleviate the symptomatology of depression.

The most obvious question which comes to mind is: Is it possible or even necessary to delineate the premorbid personality characteristics of depression-prone individuals in order to understand and effectively treat depressive illness? In light of the results of this study the answer would be "no", however, the effective treatment of a particular depressive episode provides little understanding in terms of preventing recurrent episodes or the prevention of an initial attack of depression. Secondly, while the patients in this study were significantly less depressed after involvement in the group therapy program, exactly which program components were most influential in producing change and for which patients, could not be elicited from the data available.

It is readily apparent that various types of further research are warranted to confront the dilemmas presented. If a depression-prone personality is isolated it may be possible to focus on the prevention of depressive illness. If therapy programs are compared (which seems to be the present emphasis in research), more effective and individual programs can be designed and implemented.

The major problem facing the researcher and clinician is, of course, the "quagmire of formal nosology" (Friedman, 1974, p. 282) which only serves to confuse the results of research. As each investigator defines a specific conceptual framework, generalization of the results and replication is limited. It does seem though, that as long as patients persist in exhibiting relatively unique and

individual manifestations of depressive illness, personal histories, responsivity to treatment, etc., the "quagmire" will be sustained for some time.

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APPENDIX A

DAY THERAPY PROGRAM

DEPARTMENT OF PSYCHIATRY

EDMONTON GENERAL HOSPITAL

OBJECTIVES

The day therapy program offered by the Edmonton General Hospital uses the group approach and various activities to help the participant recognize and cope with interpersonal and emotional difficulties.

It has been found that most behaviour patterns and emotional responses involving family, classmates at school and colleagues at work are learned and experienced in a group setting. Therefore, the group setting is an effective mechanism through which difficulties can be explored.

People learn from each other and the ways an individual may learn to relate within the group are also applicable to the ways an individual will relate in everyday life.

This specially developed program provides each person with the opportunity to increase self-confidence and awareness, effect a more acute understanding of self and others, identify and resolve problems, make decisions and cope with responsibilities on a mature basis, reach logical conclusions, become adept at recognizing and expressing feelings in a healthy way, and to improve his ability to communicate effectively.

PROGRAM DETAILS

All members of the staff - the nurse, the psychiatrist, the social worker, the psychologist and the referring physician work as a team to assist each person to assist himself. The program is conducted on level 8 of the "R" wing, Monday to Friday, from 0900 hours to 1530 hours (9:00 a.m. to 3:30 p.m.). Participants will find the 111th Street entrance at 10016 - 111 Street the most convenient.

Morning and afternoon coffee and luncheon will be served daily.

A schedule of the following week's activities will be posted each Friday. This will assist the participants to make personal appointments and arrangements well in advance without the danger of conflicting times.

Each participant is required to register daily to facilitate maintaining records and relaying messages.

PARTICIPATION

To receive the greatest benefit from the program it is important to participate fully for the entire treatment period. The length of the treatment is individually assessed based on the person's personal needs and the progress made. The program is not a course and there are no tests or examinations to be passed.

We ask that physician appointments and other engagements be made outside of program hours. However, if this is not always possible, please advise the staff of the appointment in advance of being absent or late.

If the participant is on any type of medication we ask that the medication be brought to the day therapy program and taken at the prescribed time.

Any participant who is absent without the staff's knowledge and, if the staff is unable to make contact in 48 hours, will be assumed to have dropped out and will be automatically discharged from the program.

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January 18-22, 1982	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9 - 10	COGNITIVE THERAPY / COMMUNITY GROUP	COMMUNITY 9 - 9:30 / PT. GOVERNMENT 9:30 - 10	COMMUNITY GROUP	DIETICIAN	COGNITIVE THERAPY / COMMUNITY GROUP
10 - 11	GESTALT / SELF AWARENESS	EMOTIONAL COMPETENCE	GESTALT 0945-1100 / DR. ROWSON'S GROUP	RELAXATION THERAPY	ASSERTIVE TRAINING / APPLIED SOCIAL SKILLS
11 - 11:30			BREAK		
11:30 - 12:30	GROUP A / GROUP Z	GROUP A / GROUP Z	GROUP A / GROUP Z	GROUP A / GROUP Z	GROUP A / GROUP Z
12:30 - 1:15			LUNCH		
1:15 - 2:15	DR. LUNDEEN"S GROUP / HUMAN SEXUALITY	ASSERTIVE TRAINING / APPLIED SOCIAL SKILLS	COMMUNICATION SKILLS	HUMAN SEXUALITY / MUSIC THERAPY	STRESS
2:30 - 3:30	ASSERTIVE TRAINING / APPLIED SOCIAL SKILLS	SELF AWARENESS	HUMAN SEXUALITY / FILM	DECSA	MANAGEMENT

APPENDIX B

INSTRUCTIONS FOR SCORING THE BECK DEPRESSION INVENTORY (BDI) SHORT FORM

When the patient has completed the questionnaire, simply add the scores of all categories to compute the total score. *If* a patient circles more than one statement in a category, count only the statement with the highest score.

Since the maximum score for each item is three, the maximum score for the entire scale is 39.

The BDI is designed to help establish the existence of depression and to provide a guide to its severity. The following chart is useful in estimating each level of depression:

DEGREE OF DEPRESSION	RANGE OF SCORES
None or minimal	0-4
Mild	4-7
Moderate	8-15
Severe	16+

8-74-ELVP-4-CA-446-M (MC-883)

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Name_____ Date_____

INSTRUCTIONS

On this questionnaire are groups of statements. Please read the entire group of statements of each category. Then pick out the one statement in that group which best describes the way you feel today, that is, *right now*. Circle the number beside the statement you have chosen. If several statements in the group seem to apply equally well, circle each one.

Be sure to read all the statements in each group before making your choice.

A. (Sadness)
- 3 I am so sad or unhappy that I can't stand it.
- 2 I am blue or sad all the time and I can't snap out of it.
- 1 I feel sad or blue.
- 0 I do not feel sad.

B. (Pessimism)
- 3 I feel that the future is hopeless and that things cannot improve.
- 2 I feel I have nothing to look forward to.
- 1 I feel discouraged about the future.
- 0 I am not particularly pessimistic or discouraged about the future.

C. (Sense of Failure)
- 3 I feel I am a complete failure as a person (parent, husband, wife).
- 2 As I look back on my life, all I can see is a lot of failures.
- 1 I feel I have failed more than the average person.
- 0 I do not feel like a failure.

D. (Dissatisfaction)
- 3 I am dissatisfied with everything.
- 2 I don't get satisfaction out of anything anymore.
- 1 I don't enjoy things the way I used to.
- 0 I am not particularly dissatisfied.

E. (Guilt)
- 3 I feel as though I am very bad or worthless.
- 2 I feel quite guilty.
- 1 I feel bad or unworthy a good part of the time.
- 0 I don't feel particularly guilty.

F. (Self-Dislike)
- 3 I hate myself.
- 2 I am disgusted with myself.
- 1 I am disappointed in myself.
- 0 I don't feel disappointed in myself.

G. (Self-Harm)
- 3 I would kill myself if I had the chance.
- 2 I have definite plans about committing suicide.
- 1 I feel I would be better off dead.
- 0 I don't have any thoughts of harming myself.

H. (Social Withdrawal)
- 3 I have lost all of my interest in other people and don't care about them at all.
- 2 I have lost most of my interest in other people and have little feeling for them.
- 1 I am less interested in other people than I used to be.
- 0 I have not lost interest in other people.

I. (Indecisiveness)
- 3 I can't make any decisions at all anymore.
- 2 I have great difficulty in making decisions.
- 1 I try to put off making decisions.
- 0 I make decisions about as well as ever.

J. (Self-Image Change)
- 3 I feel that I am ugly or repulsive-looking.
- 2 I feel that there are permanent changes in my appearance and they make me look unattractive.
- 1 I am worried that I am looking old or unattractive.
- 0 I don't feel that I look any worse than I used to.

K. (Work Difficulty)
- 3 I can't do any work at all.
- 2 I have to push myself very hard to do anything.
- 1 It takes extra effort to get started at doing something.
- 0 I can work about as well as before.

L. (Fatigability)
- 3 I get too tired to do anything.
- 2 I get tired from doing anything.
- 1 I get tired more easily than I used to.
- 0 I don't get any more tired than usual.

M. (Anorexia)
- 3 I have no appetite at all anymore.
- 2 My appetite is much worse now.
- 1 My appetite is not as good as it used to be.
- 0 My appetite is no worse than usual.

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APPENDIX C

THE MOONEY PROBLEM CHECKLIST (ADULT FORM) *

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* The Mooney Problem Checklist (Adult Form) is copyrighted material and may be obtained from The Psychological Corporation, 304 East 45th Street, New York, New York, 10017.

APPENDIX D

GOUGH-SANFORD RIGIDITY SCALE

The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement below is your PERSONAL OPINION. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others and perhaps uncertain about others; whether you agree or disagree with any statement, you can be sure that many people feel the same as you do.

On the Answer Sheet -- Mark each statement according to how much you agree or disagree with it. Please mark every one. Circle +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

+1: I agree a little.

+2: I agree on the whole.

+3: I agree very much.

-1: I disagree a little.

-2: I disagree on the whole.

-3: I disagree very much.

1. I am often the last one to give up trying to do a thing.
2. There is usually only one best way to solve most problems.
3. I prefer work that requires a great deal of attention to detail.
4. I often become so wrapped up in something I am doing that I find it difficult to turn my attention to other matters.
5. I dislike to change my plans in the midst of an undertaking.
6. I never miss going to church.
7. I usually maintain my own opinions even though many other people may have a different point of view.
8. I find it easy to stick to a certain schedule, once I have started it.
9. I do not enjoy having to adapt myself to new and unusual situations.
10. I prefer to stop and think before I act even on trifling matters.
11. I try to follow a program of life based on duty.
12. I usually find that my own way of attacking a problem is best, even though it doesn't always seem to work in the beginning.

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13. I am a methodical person in whatever I do.
14. I think it is usually wise to do things in a conventional way.
15. I always finish tasks I start, even if they are not very important.
16. I often find myself thinking of the same tunes or phrases for days at a time.
17. I have a work and study schedule which I follow carefully.
18. I usually check more than once to be sure that I have locked a door, put out the light, or something of the sort.
19. I have never done anything dangerous for the thrill of it.
20. I believe that promptness is a very important personality characteristic.
21. I am always careful about my manner of dress.
22. I always put on and take off my clothes in the same order.

NAME: _____

DATE: _____

ANSWER SHEET

1. -3 -2 -1 +1 +2 +3
2. -3 -2 -1 +1 +2 +3
3. -3 -2 -1 +1 +2 +3
4. -3 -2 -1 +1 +2 +3
5. -3 -2 -1 +1 +2 +3
6. -3 -2 -1 +1 +2 +3
7. -3 -2 -1 +1 +2 +3
8. -3 -2 -1 +1 +2 +3
9. -3 -2 -1 +1 +2 +3
10. -3 -2 -1 +1 +2 +3
11. -3 -2 -1 +1 +2 +3
12. -3 -2 -1 +1 +2 +3
13. -3 -2 -1 +1 +2 +3
14. -3 -2 -1 +1 +2 +3
15. -3 -2 -1 +1 +2 +3
16. -3 -2 -1 +1 +2 +3
17. -3 -2 -1 +1 +2 +3
18. -3 -2 -1 +1 +2 +3
19. -3 -2 -1 +1 +2 +3
20. -3 -2 -1 +1 +2 +3
21. -3 -2 -1 +1 +2 +3
22. -3 -2 -1 +1 +2 +3